

MOUNTING LION

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North Dakota has a resident mountain lion population. The size of that population, however, is a mystery. This lion, photographed in the Dakota Zoo in Bismarck, isn't part of that population.

RON WILSON



EVIDENCE

North Dakota is Home to Mountain Lions, But How Many?

By Ron Wilson

Mountain lions have needs. More specifically, these ambush hunters demand steep, rugged country with dense vegetation to enhance chances of catching prey – mostly deer and elk.

The thing is, only 2 percent of what North Dakota has to offer fits this bill, according to a habitat study – and other findings concerning our largest predator – presented to state lawmakers in June.

“We have habitat in the badlands and Missouri River breaklands to sustain a small population of mountain lions,” said Dorothy Fecske, North Dakota Game and Fish Department furbearer biologist. “But what that population is remains an unknown.”

Based on an initial analysis of habitat quality, chunks of the badlands and Missouri River breaklands could support an average of 45 to 74 resident adult animals under a management scenario with no harvest mortality, Fecske said. Bear in mind – and this is important – that this is not an estimate of the current population, but simply an estimate of habitat potential for the area.

“The mapping tells us where in fact in North Dakota mountain lions can sustain themselves and where they can’t,” said Greg Link, Department assistant wildlife division chief. “A lot of people think a lion can live in their back 40, especially if there has been a sighting in the area. But these lions are just passing through. If the animal doesn’t have the sneak and peek ambush habitat needed for survival – and a large amount of space secluded from humans – it’s not going to stick around.”





Dorothy Fecske, North Dakota Game and Fish Department furbearer biologist, explains how to age a mountain lion by its teeth.

Mountain Lions on the Move

Many verified sightings of mountain lions in North Dakota are animals wandering through – here today, gone tomorrow. The most celebrated was a subadult male lion that was radio-collared for research in the Black Hills in South Dakota.

The young male was located by researchers in September 2004 in northwestern South Dakota, and three months later it was spotted in Turtle River State Park in eastern North Dakota. Confirmed to be the study cat from South Dakota, its whereabouts were monitored by State Game and Fish Department personnel. The animal was last heard from as it made its way through northwestern Minnesota before moving into Manitoba, Canada.

Biologists believe that mountain lions from elsewhere – South Dakota and Montana – that leave familiar digs and make their way into North Dakota will contribute to the lion population.

Lions in the badlands, said Dorothy Fecske, Department furbearer biologist, are geographically isolated from breeding populations in Montana and South Dakota due to vast expanses of agricultural and grassland landscapes surrounding the region. “The North Dakota population is vulnerable because of its isolation,” she said. “So immigration, which is important for maintaining a genetically healthy population, into our population is going to be limited. This is something we will have to monitor closely (in terms of harvest).”

Because of increased harvests of mountain lions in Montana and South Dakota, immigration to the badlands could be influenced, making the population – especially the female lion population – in North Dakota more vulnerable to harvest mortality.

To the pedestrian, the badlands seem ideal to harbor any number of mountain lions. In reality, the rugged up and down of western North Dakota isn't altogether the cat's meow. Fecske, who studied mountain lions for five years in the Black Hills in South Dakota, said that while the badlands contain suitable habitat – and suitable numbers of prey – and supports an unknown number of lions, most of the region does not contain the highest quality concealment and stalking cover and topography identified for the species by the habitat study map. In fact, she said, nowhere in North Dakota is there large expanses of dense forest cover and steep slopes that mountain lions favor.

Looking Back

It's unlikely that mountain lions were ever numerous in North Dakota. Historic records tell us these animals were scarce on the open prairie, but found in the 1800s – and this will sound familiar – along the Little Missouri River in western North Dakota, the Killdeer Mountains and Missouri River breaklands.

Killed indiscriminately, mountain lions were believed to be eliminated from the North Dakota landscape by the early 1900s. The last confirmed record in the state was in 1902 when a male cougar was shot near Williston.



Mountain lions have the tools to bring down prey – mostly deer and elk.

When lions returned to North Dakota, Fecske said, is unknown. According to Game and Fish Department records, the earliest record of a mountain lion in the state was 1958 near Killdeer. Over the following 33 years, there were 11 confirmed reports. In 1991, following the shooting of a female lion in western North Dakota, lawmakers classified these big predators as furbearers, and the Game and Fish Department has managed lions, along with other rare furbearers, with a closed season.

Fast forward to 2001-05 when there were 41 verified reports of mountain lions in North Dakota, 32 (78 percent) of which occurred within or near the badlands, Fecske said. That's not to say there were 41 individual cougars roaming the countryside, as many animals were likely seen more than once.



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Biologists know more than they use to about mountain lions in North Dakota, but there is still much to learn.

Experimental Season

Five mountain lions were killed in North Dakota during a highly publicized experimental season approved in the governor's 2005-06 small game and furbearer hunting proclamation. The experimental season, Fecske said, was initiated so Game and Fish Department biologists could gather important information on a small number of lions without causing irreversible harm to the region's population. "Once you have an actual lion in front of you, it tells you much more than you knew before," said Link, who noted that hunters in this experimental season were responsible for providing intact carcasses to the Department so biologists could collect biological information and also record where the lions were harvested.

The season began September 2, 2005 and ended January 15, 2006 when the fifth lion was taken. Of the five lions, all of which were taken in western North Dakota, three were males and two were females. The first two were shot during the deer gun season in November.

The five mountain lions were taken in a 630 square mile area in McKenzie, Dunn and Billings counties. Three of the lions were considered residents and were killed within a 45 square mile area long the Little Missouri River, while an additional kitten was treed and photographed in the same area, but not harvested.

Altogether, an adult male, a nonbreeding adult female and two family groups were documented during the experimental season, answering the question of whether the badlands harbored resident, breeding animals, rather than just young transient males wandering through from South Dakota, Montana or Wyoming. "We hypothesized that we had some breeding animals, but no one knew for sure," Link said.

Since the experimental season, Fecske said there have been five more verified reports of mountain lions in the badlands and Killdeer Mountains. "That doesn't mean that these are five different cats because these animals travel over such a large area (from 50 to a few hundred square miles)," she said. "What this does tell us is that we still have mountain lions in the badlands."

Department wildlife managers plan to propose another experimental mountain lion season in 2006-07. Some of the proposed guidelines for the season look like this:

- September 2, 2006 through March 12, 2007. The season will close early, however, if the quota of five lions is taken before the March date.
- The use of dogs will be allowed, however, no hunting or pursuing with dogs will be allowed until after January 1, 2006. People

hunting with dogs may not pursue or take a female mountain lion accompanied by kittens.

- Legal animals for the experimental season are described as any mountain lion other than kittens (lions with visible spots) or females accompanied by kittens.

- Any mountain lion taken during the season must be reported to the Game and Fish Department within 12 hours and the entire intact animal must be submitted to the Department for analysis. Legally taken animals will be returned to hunters following analysis.

- The five-lion quota includes animals taken by USDA Wildlife Services, the Game and Fish Department, private landowners defending livestock, roadkill, incidental mountain lions taken by traps or snares, and animals taken for human safety reasons.

Managing Mountain Lions

Aside from a proposed second experimental season, the

Department will continue to record and verify reported sightings of mountain lions; continue the deer hunter observation questionnaire and furbearer harvest survey; test the habitat suitability map; coordinate with tribal authorities and other state agencies on lion management issues; and continue public education efforts.

In a further attempt to monitor the population, Fecske said plans are to conduct a snow track survey in winter in the badlands. "After a fresh snow, we'll look for tracks on predetermined routes," she said. "Harvest from the first experimental season showed us that the animals were taken from a relatively small area. We'll use the habitat maps to pick our survey routes and cover a much larger area to help us determine the extent mountain lions are distributed throughout the region."

In terms of studying mountain lions – a notoriously secretive animal – the snow track survey and other research methods are just the beginning, Link admits. "We certainly know more about mountain lions in North Dakota than we used to, but in reality, we're just scratching the surface," he said.

RON WILSON is editor of *North Dakota OUTDOORS*.